

IN THE CLAIMS

Please amend the claims as shown below, in which deleted terms are indicated with strikethrough and/or double brackets, and added terms are indicated with underscoring. The following list of claims replaces all previous versions, and listings of claims in the application.

1. (Canceled).

2. (Previously presented) The land mobile satellite communication system as claimed in claim 3, including a plurality of said communication satellite stations respectively mounted on a plurality of low earth communication satellites and each said station including a means for communicating with other said stations through inter-satellite links.

3. (Currently amended) A land mobile satellite communication system comprising:
at least one communication satellite station;

a plurality of portable communication terminals for communicating with each other through a communication link to be formed to include said at least one communication satellite station; and

a plurality of mobile repeater stations mounted on mobiles located on the earth for repeating a communication in said communication link formed between said portable communication terminals and including said at least one communication satellite station, wherein:

each said mobile repeater station is operable with any of said portable communication terminals;

each said mobile repeater station includes a means for communicating with said at least one communication satellite station by using a carrier wave of higher frequency than a frequency of a carrier wave to be used for communicating with said portable communication terminals; and

a communication link between any specific one of the communication terminals and any specific one of said at least one communication satellite station can be established via a plurality of communication channels respectively including different ones of the mobile repeater stations.

4. (Allowed and Currently amended) A land mobile-satellite communication system comprising:

a plurality of [[said]] communication satellite stations respectively mounted on a plurality of low earth communication satellites and each said station including a means for communicating with other said stations through inter-satellite links;

a plurality of portable communication terminals for communicating with each other through a communication link to be formed to include said communication satellite stations; and

a plurality of mobile repeater stations mounted on mobiles located on the earth for repeating a communication in said communication link formed between said portable communication terminals and including said communication satellite stations; wherein

said portable communication terminals include a means for transmitting a position signal repeatedly, said position signal including an identification code of the portable communication terminals and a test pattern;

said mobile repeater stations include a means for transmitting a repeated position signal to said communication satellite stations by adding a self identification code to said position signal received from said portable communication terminals; and

said communication satellite stations include a means for selecting one of said mobile repeater stations which transmits said repeated position signal including the test pattern having a highest quality to be a mobile repeater station for the portable communication terminals.

5. (Allowed and Currently amended) A [[Land]] land mobile satellite communication system comprising:

a plurality of [[said]] communication satellite stations respectively mounted on a plurality of low earth communication satellites and each said station including a means for communicating with other said stations through inter-satellite links;

a plurality of portable communication terminals for communicating with each other through a communication link to be formed to include said communication satellite stations; and

a plurality of mobile repeater stations mounted on mobiles located on the earth for repeating a communication in said communication link formed between said portable communication terminals and including said communication satellite stations; wherein

said mobile repeater stations include a means for communicating with said communication satellite stations by using a carrier wave of higher frequency than a frequency of a carrier wave to be used for communicating with said portable communication terminals;

said portable communication terminals include a means for transmitting a position signal approximately periodically, said position signal including an identification code of the portable communication terminals and a test pattern;

said mobile repeater stations including a means for transmitting a repeated position signal to said communication satellite stations by adding a self identification code to said position signal received from said portable communication terminals; and

said communication satellite stations include a means for selecting one of said mobile repeater stations which transmits said repeated position signal including the test pattern having a highest quality to be a mobile repeater station for the portable communication terminals.

6. (Original) The land mobile satellite communication system as claimed in claim 2, wherein:

said portable communication terminals include a means for communicating with said mobile repeater stations as well as with conventional land mobile communication systems.

7. (Original) The land mobile satellite communication system as claimed in claim 2, wherein:

said mobile repeater stations include a means for converting at least one of frequency and modulation for communication by changing software to allow communication with conventional land mobile communication systems.

8. (Original) The land mobile satellite communication system as claimed in claim 2, wherein:

said communication satellite stations include a means for transmitting information about their own position; and

said mobile repeater stations include means for aiming an antenna beam thereof at the communication satellites according to received information about the position of the communication satellites and a detected position of the mobile repeater stations.

9. (Original) The land mobile satellite communication system as claimed in claim 3, wherein:

said communication satellite stations include a means for transmitting information about their own position; and

said mobile repeater stations include means for aiming an antenna beam thereof at the communication satellites according to received information about the position of the communication satellites and a detected position of the mobile repeater stations.

10. (Original) The land mobile satellite communication system as claimed in claim 2, wherein:

said communication satellite stations include a means for functioning as a Peering points or Proxies to provide accessibility to conventional land mobile telephone systems or Internet.

11. (Original) The land mobile satellite communication system as claimed in claim 2, wherein:

said communication satellite stations include a means for storing data received from said portable communication terminals and for functioning as servers.

12. (Original) The land mobile satellite communication system as claimed in claim 2, wherein:

said mobile repeater stations include a means for responding to a request from said communication satellite stations and / or portable communication terminals and for functioning as providers.

13 (Canceled).

14. (Previously presented) The land mobile satellite communication system as claimed in claim 3, wherein: said mobiles are vehicles.

15. (Previously presented) The land mobile satellite communication system as claimed in claim 14, wherein: power supplies of said vehicles provide power to said mobile repeater stations.

16. (Previously presented) The land mobile satellite communication system as claimed in claim 3, wherein: said mobile repeater stations include high frequency plane antennas.

17. (Previously presented) The land mobile satellite communication system as claimed in claim 3, wherein: communications between the portable communication terminals and the

mobile repeater stations use S or near S frequency band ranging from 1-10 Ghz, and communications between the low earth communication satellite station and the mobile repeater stations use high frequency Ku band.

18. (Previously presented) The land mobile satellite communication system as claimed in claim 3, wherein said mobile repeater stations include the functions of cache, proxy and server for storing transferred data.

19 (Canceled).

20. (Currently amended) The land mobile satellite communication system as claimed in claim 3, wherein the communication link having highest signal quality is selectively established via the one of the plurality of communication channels including said mobile repeater station with appropriate proximity to the specific communication terminal ~~and giving highest signal quality~~ thereby providing highest quality communication between the portable communication terminals.

21. (Previously presented) The land mobile satellite communication system as claimed in claim 3, wherein the communication link is selectively established via the one of the plurality of communication channels including said mobile repeater station giving highest signal quality.

22. (Previously presented) The land mobile satellite communication system as claimed in claim 21, wherein all others of the plurality of communication channels are reserved as

spares for establishing the communication link, and the communication link may be selectively switched to be established via one of the spares when the signal quality for the one of the spares comes to exceed the signal quality of the one communication channel.

23. (Previously presented) The land mobile satellite communication system as claimed in claim 3, wherein said communication channels respectively include different ones of the mobile repeater stations which are located near the portable communication terminal.

24. (New) The land mobile satellite communication system as claimed in claim 3, wherein: each of said mobile repeater stations and communication satellite stations additionally functions as a server for storing e-mails transmitted from one of the portable communication terminals and for mailing them to a portable communication terminal in response to a request therefrom.

25. (New) The land mobile satellite communication system as claimed in claim 24, wherein the server further functions as a provider of at least one of internet, FTP and proxy server for sending a variety of data.

26. (New) The land mobile satellite communication system as claimed in claim 3, wherein a subscriber carrying one of said portable communication terminals can report a disaster situation to the other portable communication terminals dispersing nearby through said mobile repeater stations and said communication satellite stations, and wherein each of the communication satellite stations includes a means for increasing beam width thereof thereby

increasing transmission power.

27. (New) The land mobile satellite communication system as claimed in claim 3, wherein each of said mobile repeater station further comprises a means for collecting, storing and transmitting information about traffic, accidents and climate data to the communication satellite stations; and wherein the portable communication terminals can obtain the information about the traffic, accidents and climatic data, and wherein a tracking between the communication satellite stations and mobile repeater stations is performed for effective communication.

28. (New) The land mobile satellite communication system as claimed in claim 3, wherein each of said mobile repeater stations includes a composite power supply having power generators for generating and storing electric power, said power generators driven by at least one of a gasoline engine, fuel cell and solar batteries thereby assuring enough power supply to the mobile repeater station.